

# HIV: Focus on Disparities

Grade 10, Lesson 12b

Suggested for use with 10<sup>th</sup> grade, but appropriate 9-12

## Student Learning Objectives

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The student will be able to ...

1. identify the three ways HIV is commonly spread.
2. describe five strategies for reducing one's risk of HIV and explain why each is effective.
3. distinguish between stereotypes/prejudices and facts about where HIV came from and about who is vulnerable and why.
4. recognize his or her own personal vulnerability to HIV and express intention to avoid or reduce risk.

## Agenda

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1. Quickly summarize take-away messages from the lesson.
2. Have each of four small groups read one *HIV Reference Sheet*.
3. Help the small groups to make posters and prepare oral reports of the key concepts from their group's *Reference Sheet*.
4. Have each group report their key concepts to the class.
5. Use *HIV Hotline Handout* as a focused writing activity to help students personalize and strategize plans for avoiding or reducing risk of HIV.
6. Assign homework.

This lesson was most recently edited January 20, 2011.

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**Materials Needed**

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**Student materials**

- **HIV & AIDS Reference Sheets 1 – 4** (one *Sheet* per student – for example, a class of 28 would need seven of each *Sheet* so that every student could have one of the four)
- **HIV Hotline Handout** (one copy per student)
- **Individual Homework: Who gets HIV and how could they avoid it?** (one copy per student)
- **Family Homework: Talking about HIV and Stereotypes** (one copy per student)  
Reminder: The English version is on the last page of this lesson plan. You will find the *Family Homework* in English, Spanish, Russian, Chinese, Vietnamese and Arabic at [www.kingcounty.gov/health/FLASH](http://www.kingcounty.gov/health/FLASH) – click on “Parents & Guardians.”

**Classroom materials, equipment**

- **Poster materials** (butcher paper, colored markers, other art supplies if available – enough for four posters per class)
- **Tape or pins** to hang posters

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**Teacher Preparation**

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**Well in advance ...**

- If you are teaching this HIV lesson in Washington State outside of a whole *FLASH* unit, then 30 days or more before the lesson, **notify families** that you will be teaching about HIV.<sup>1</sup> (If you teach this lesson *in* the context of a unit, you should have already given families 30 days’ notice. There is no need to repeat notice for the HIV lessons.) Let families know that you hope to partner with them in educating their child. Offer to answer their questions. Explain, too, that they do have a right to excuse their child and that you will respect that decision. A sample letter to families regarding the whole unit is available as *Appendix 1* of this curriculum in your binder in English and in six languages – English, Spanish, Chinese, Russian, Vietnamese and Arabic – online ([www.kingcounty.gov/health/FLASH](http://www.kingcounty.gov/health/FLASH)).

**The day before the class ...**

- **Review** the contents of the **HIV & AIDS Reference Sheets**.
- **Make copies** and gather Materials Needed (see above).

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**Standards**

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**National Health Education Standard:**

- **Standard 3:** Students will demonstrate the ability to access valid information, products, and services to enhance health.  
**Performance Indicator 3.12.1** Evaluate the validity of health information, products, and services.

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<sup>1</sup> In other states, a different notice period may apply. See *Appendix 2: Laws Relevant To a Sexual Health Unit*.

- **Standard 7:** Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.  
**Performance Indicator 7.12.3** Demonstrate a variety of behaviors to avoid or reduce health risks to self and others.

**Washington State Health Education Standard:**

- **Essential Academic Learning Requirement (EALR) 2:** The student acquires the knowledge and skills necessary to maintain a healthy life: Recognizes dimensions of health, recognizes stages of growth and development, reduces health risks, and lives safely.  
**Component 2.3** Understands the concepts of prevention and control of disease.  
**Grade Level Expectation (GLE) 2.3.1** Analyzes personal health practices.
- **Essential Academic Learning Requirement (EALR) 3:** The student analyzes and evaluates the impact of real-life influences on health.  
**Component 3.2:** Evaluates health and fitness information.  
**Grade Level Expectation (GLE) 3.2.1:** Evaluates health and fitness information, products, and services.

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**Activities**

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NOTE: Instructions to you are in regular font. Suggested script of what to say is in italics. Feel free to modify the script to your style and your students' needs.

**1. Quickly summarize take-away messages from the lesson.**

*Today will be review for many of you, and I think you'll learn a few new facts about HIV and AIDS as well. You already know that anyone who takes risks can get infected – that it doesn't matter what sex or sexual orientation you are or what race you are or what country or city you were born in; we are all at risk. But what I want you to understand today, besides that, is that some people's risk is higher, not because of who they are or even just what they do. Their risk may be higher because of who they do it with. If that person is more likely to have been exposed because of where **they** have lived or who **they've** had sex or shared needles with. I want to ask you to examine your assumptions today and ask yourselves what is true and what's a stereotype. And what I want you to remember from this lesson in particular is that **HIV is entirely preventable – you can choose to protect yourself.***

**2. Have each of four small groups read one *HIV Reference Sheet*.**

Divide the class into four groups. Pass out the ***HIV & AIDS Reference Sheets*** so that each person in a group has the same *Reference Sheet* (1, 2, 3 or 4). Give students about five minutes to take turns reading their *Reference Sheet* aloud to one another within their small group.

**3. Help the small groups to make posters and prepare oral reports of the key concepts from their group's *Reference Sheet*.**

Provide each small group with poster materials. Give them eight to ten minutes to create posters and an oral report to inform the class of the important ideas they learned from their particular *Reference Sheet*. Circle the room to make sure the groups understand their activity, and lend assistance if needed.

If students ask where the information on their *Reference Sheet* came from, feel free to share the citations provided in the teacher notes (below).

**4. Have each group report their information to the class.**

Allow two to three minutes per oral report followed by two to three minutes' discussion. Invite the rest of the class to ask questions of the presenters. Help with the answers if necessary.

**Main ideas of *HIV & AIDS Reference Sheet 1***

- If a person has HIV, it is in their blood, their semen or vaginal fluid, and, if they're nursing or have recently been pregnant, in their breast milk.<sup>1</sup>
- Once infected, with or without symptoms, the person has HIV and will have it for the rest of their life. They will always be able to transmit it.<sup>2</sup>
- AIDS is the end stage of having HIV, when a health care provider has found that the person has HIV and either a low T-cell count or an opportunistic infection.<sup>3</sup>

- Medications can prevent and treat those things (low T-cells and infections) so the person may live many years, if they have access to medication and can tolerate the side effects.<sup>4,5</sup>
- Eventually an opportunistic infection may be fatal.<sup>6</sup>

**If students raise these questions about myths and stereotypes ...**

- If they say they heard there was a cure (e.g., “Look at Magic Johnson!” “I saw something on the Internet.”), be clear that cures on the Internet are unproven and possibly dangerous.<sup>7</sup> Explain that medication can boost a person’s immune response so much that their virus levels may drop to where they are undetectable by ordinary tests. That doesn’t mean it is gone. It’s moved to other parts of the body, such as lymph nodes.<sup>8</sup> Studies have found HIV in the semen of men who had no detectable HIV in their blood.<sup>9</sup>

**Main ideas of HIV & AIDS Reference Sheet 2**

- HIV originated in Africa, as a chimpanzee virus mutated and infected a human being, **probably when hunters became exposed to the animal’s blood.**<sup>10,11</sup> This is important to emphasize because students will often raise the racist, xenophobic hypothesis that it was sex between humans and animals in Africa that led to the HIV epidemic.
- HIV rate is higher for people of African descent probably partly because a gene that protects them from malaria also makes them particularly vulnerable to HIV.<sup>12</sup>
- HIV rate is higher among men who have sex with men partly because the high prevalence increases their risk of exposure.<sup>13</sup>
- HIV rate is higher among people of color and gay men partly due to racism and homophobia, which contribute to some people avoiding getting tested or treated.<sup>14,15</sup> (See *Reference Sheet 2* for fuller explanation.)
- These concepts (above) are important because African American and gay students and, especially, their classmates may think that Black people and gay men of all colors simply have more sex or more partners than people from other groups. It’s important that they understand what else contributes to the epidemic.

**If students raise these questions about myths and stereotypes ...**

- If they say they heard HIV was developed in a laboratory to infect Africans and African Americans, explain that we know that isn’t true.<sup>16</sup> But acknowledge that, while HIV occurred naturally, it’s understandable for the community to mistrust government and scientists. There’s ample evidence of racial discrimination in health care.<sup>17</sup> And it was less than a century ago that government-funded scientists at the Tuskegee Institute withheld penicillin from a group of African American men with syphilis for decades without their knowledge or consent. Your students can read more about the history of that horrific research here: [www.cdc.gov/tuskegee/timeline.htm](http://www.cdc.gov/tuskegee/timeline.htm)

**Main ideas of HIV & AIDS Reference Sheet 3**

- The most common way HIV is transmitted is sexually, especially through anal sex and vaginal sex.<sup>18</sup>
- Unprotected anal sex is considered **very** risky, both for same-sex and heterosexual couples. Unprotected vaginal sex is also risky. Unprotected oral sex can also transmit HIV.<sup>19</sup>
- Sharing syringes to shoot drugs is considered **very** risky. Sharing needles for tattoos and piercings can also transmit HIV.<sup>20</sup>
- Women can pass HIV to their babies during pregnancy, birth or breastfeeding. Women with HIV can reduce the risk to the fetus tremendously by taking medication during

pregnancy (from one in four fetuses infected without medication to one in 50 when the pregnant woman gets treatment).<sup>21</sup>

- Nowadays in developed countries, transfusion is very safe (one chance in 1½ million).<sup>22</sup>

**If students raise these questions about myths and stereotypes ...**

- If they propose that people can get HIV from kissing or from a human bite, explain that both are nearly impossible. In fact, there is only one documented case worldwide in which HIV was transmitted through kissing; both people were long-term methamphetamine users and had significant bleeding of the gums.<sup>23</sup>
- If they ask about mosquitos transmitting HIV, explain that **other** diseases can be transmitted by mosquitos, but not HIV.<sup>24</sup>

**Main ideas of HIV & AIDS Reference Sheet 4**<sup>25</sup>

- **Abstaining** is the safest way to reduce risk. Abstaining from anal, vaginal and oral sex and from drugs.
- People who do have sex can reduce risk significantly by:
  - using **condoms** and **dental dams** correctly every single time they have sex.<sup>26,27</sup>
  - reducing the **number of partners** they have sex with in their lifetimes and, especially, at the same time.
- People who do use injection drugs can reduce risk by using **sterile needles**.
- Everyone who has had sex or used needles for drugs can reduce their risk of spreading HIV – or of progressing to AIDS – by **getting tested** at least once for HIV and also for other STDs – and yearly if they’re taking ongoing risks.<sup>28</sup>
- Pregnant women can reduce risk by getting tested for HIV and, if they test positive, taking **medication during the pregnancy**.

**5. Use HIV Hotline Handout as a focused writing activity so that students can personalize and strategize plans for avoiding or reducing risk of HIV.**

Distribute the **HIV Hotline Handout**. Allow people four to five minutes for answering at least one caller’s question. Those who finish early could answer a second question.

Close with a piece of advice: *Some of you will always be clean and sober. But I have a closing thought to share for those who, now or in the future, might not. People who use alcohol and other drugs can reduce their risk of HIV by **never having sex when they’ve been drinking or using** (when it would be more challenging to use protection).<sup>29</sup> Please take care of yourselves and the people you care about.*

**6. Explain and assign homework.**

- Individual Homework: Who gets HIV and how could they avoid it?*
- Family Homework: Talking about HIV and Stereotypes*

Reminder: The English version is on the last page of this lesson plan. You will find the *Family Homework* in English, Spanish, Russian, Chinese, Vietnamese and Arabic at [www.kingcounty.gov/health/FLASH](http://www.kingcounty.gov/health/FLASH) – click on “Parents & Guardians.”

# HIV & AIDS Reference Sheet 1

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## What are HIV & AIDS and how do they act in the human body?

**HIV** is a virus carried in blood, semen, vaginal fluid and breast milk. HIV stands for **Human Immunodeficiency Virus**. HIV causes **Acquired Immune Deficiency Syndrome** or **AIDS**. AIDS is the last stage of **HIV Disease**.

Three out of four people with HIV have flu-like symptoms (sore throat, fever, fatigue) one to six weeks after catching it. One out of four people have no symptoms at all. They can still pass the virus to others if they have sex, share needles or get pregnant, even though they don't feel sick.

Once HIV gets into the blood, it invades the white blood cells, especially the "T-Helper cells," which are the coaches of the immune system. HIV turns a T-Helper cell into a little virus factory, producing more and more copies of the virus. Eventually, the infected T-Helper cell dies, and the new copies of HIV go off to infect other T-Helper cells in the person's body. HIV stays in the body. It can't be completely killed by drugs. There is no cure. For the rest of his or her life the person with HIV can transmit it to others.

At first, the person won't have enough antibodies in their blood to show up on a test. It might take weeks for their body to build up enough antibodies. After three months, though, a test will show that they are **HIV positive**.

With T-Helper cells sick and declining in number, the immune system can't work as well. This can take ten or more years, especially with treatment, but eventually most people reach the stage of AIDS.

A medical provider determines when a person has AIDS. It takes two things for the doctor to call it that. First, the person must have HIV. Second, their T-Helper cells must have dropped to a low number, or they must have gotten a rare infection. These infections are called "opportunistic" because they take the opportunity of a person's weak immune system to make the person sick. They're diseases that a healthy immune system could control.

AIDS doesn't directly cause death. It allows these other diseases to cause the person's death. One such disease is *Kaposi's sarcoma*, caused by an ordinarily harmless virus. It is a rare kind of cancer that causes skin sores and tumors. Another one of these diseases is *Pneumocystis Pneumonia*, a rare infection of the lungs.

These days there are better drugs to prevent and treat these infections, so that people are living longer. These drugs can help eliminate or control an opportunistic infection, or help increase the number of T-Helper cells so that their immune system begins to function better. Even so, they will always be considered to have AIDS.

# HIV & AIDS Reference Sheet 2

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## Where did HIV come from?

Today HIV is found all over the world on every continent. People with HIV traveled from place to place, taking the virus with them to new places. It was long suspected that the virus passed from animals to humans in the beginning, changing (mutating) just enough to become deadly in its new host. However, many animals carry HIV-like viruses that do not harm humans.

After years of research, we now know that the virus began in a chimpanzee species from West Africa. It's likely that the chimpanzee passed the virus to a hunter when he killed the animal for food. If someone was cleaning the meat and got a cut, the chimp's infected blood could have passed the virus to the human.

In Africa and elsewhere, HIV infected the heterosexual population first. It passed from men to women and from women to men like other STDs. Today, most of the world's HIV burden is in sub-Saharan Africa. Meanwhile, in North America, during the early years of the HIV epidemic, it mainly infected the gay male population, so it passed mostly from men to other men. In other words, it's clear that HIV can infect *anyone*. It's what you do, not who you are, that puts you at risk for HIV. This is why testing is so important, whether people are gay or straight.

Why do people in sub-Saharan Africa and Western gay men have the highest rates of HIV disease?

Scientists have found a gene that evolved to protect Africans from malaria, but it actually makes them *more* susceptible to HIV. This gene partially explains why the epidemic is centered there.

What about gay men? Well, people tend to have sex within their own communities. Once HIV infected some gay men in Europe and North America, it stayed largely in that population for many years, partly because gay men were more likely to be *exposed* to HIV. That is, the odds were higher if a guy was gay that the person he liked had HIV. That's still true today for men who have sex with men (whether or not they think of themselves as gay).

Another factor is access to resources. In the US, gay men and people of color have high rates of HIV infection when compared to white people in straight or lesbian relationships. The Centers for Disease Control (also called the CDC) says that this is partly due to prejudice and fear -- homophobia and racism. Prejudice has created unequal access to jobs and therefore less access to health insurance. Prejudice makes healthy relationships harder to maintain. And some people have avoided getting tested due to past experiences of discrimination in health care settings. They feared being judged or mistreated. All of these conditions have allowed HIV to continue to spread.



# HIV & AIDS Reference Sheet 3

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## How is HIV spread today?

For HIV to be transmitted, it has to get directly into the blood. There are three ways that ordinarily happens.

**(1)** The most common way is **during sex**. Infected blood, semen or vaginal fluid can pass from one person to another through a mucous membrane. Mucous membranes are the thin-skinned, wet parts of the body. They line certain openings -- the mouth, anus, vagina, and the opening to the urethra at the tip of the penis. These membranes are very delicate, almost skinless, to allow fluids in and out of the body.

Anal sex is riskiest because the membrane that lines the rectum can easily get microscopic tears. Also, blood vessels are close to the surface of the skin there. For women, vaginal sex can be especially risky if infected semen is ejaculated into the vagina. Oral sex can also transmit HIV, especially to the person's mouth or throat. In contrast, the skin on your arm could only be penetrated by the virus if you had a cut, scrape, or skin disease. HIV cannot travel through unbroken skin, only cuts and mucous membranes.

**(2)** HIV infection can also happen when an infected person **injects drugs into a vein** ("shoots up"), and then **shares the syringe**. There's some amount of blood inside the syringe after the first person uses it, even if it isn't visible. If that blood is infected with HIV, the second user is putting it right into his or her bloodstream.

HIV could be transmitted by sharing needles for tattoos and piercings, as well.

**(3)** HIV infection can also be passed from an HIV-positive **mother to the fetus** when the mother is pregnant. It can travel from her blood to the fetus through the placenta. Transmission can also occur during delivery or by breast feeding.

Today, medication can *greatly* reduce the chance of a mother passing HIV to her baby. In the US, about one in four women with HIV (25%) pass the infection to their fetuses if they don't get treatment during the pregnancy. But among those who DO get medication while they're pregnant, fewer than one in 50 (2%) give it to the fetus. Also, a doctor can deliver a baby by C-section instead of through the vagina. However, drugs and C-sections are not available in all parts of the world. And in some places breast feeding is a mother's only option if she doesn't have access to clean water or baby formula.

Before 1985, donated blood wasn't tested for HIV. Therefore, some people became infected with HIV by transfusions. Others were infected by medicine made with clotting factor from blood. It wasn't routinely heated to kill HIV until 1985. But since 1985, all donated blood in the US (and other developed countries) is tested for HIV. Transfusions are *extremely* unlikely to transmit the virus (one chance in 1½ million) and there's no risk at all of catching HIV by donating blood.

# HIV & AIDS Reference Sheet 4

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## How can HIV infection be prevented?

### ABSTAINING FROM SEX

People don't have to abstain for their whole lives. The safest thing is to wait to have sex until they find someone they want to stay with for years, someone who's shown they can be trusted in other ways and who they're confident will have sex only with them. Some people decide not ever to have sex if they've been drinking or using drugs; they know they'd be less careful about protection. Some people decide not to have sex with new partners for a certain amount of time (for example, three months or two years or until they're married) to make sure they know a person really well.

**When people *do* have sex**, they can reduce the risk of getting or giving HIV by using a **condom** or a dental dam. These barriers, when people use them correctly every single time, greatly reduce the risk of transmitting HIV and other STDs.

People can also reduce the risk of catching HIV by limiting the **number of people** they have sex with in their lives. The problem is you can't tell if people have HIV or another STD by just looking at them; often *they* don't even know if they're infected.

What difference would having another STD make in terms of catching HIV? There are two reasons another STD increases the risk. Infections like herpes leave sores; chlamydia can make mucous membranes raw. That offers easy pathways for HIV. And all STDs draw a lot

of white blood cells to the infected area to fight the infection. Those are the very cells HIV can infect. So **getting tested** and treated for *other* STDs lowers a couple's HIV risk. It's also recommended that people wait for sex until they both get tested for HIV and retest in three months. Then they should get tested yearly or before they get with someone new.

### ABSTAINING FROM DRUGS

The safest thing is to never inject drugs into the body with a needle or use *any* kind of mind-altering drugs. Even using alcohol can mess up people's ability to make the best decisions. After drinking, people are less likely to have safer sex because they stop thinking clearly.

**People who are *already* addicted to injection drugs** (drugs that they put into their body with a needle) can protect themselves and others, until they're able to quit, by never **sharing** needles -- by using a new needle every time. New needles are free at needle exchange programs in some areas.

### PREVENTING MOTHER-TO-CHILD TRANSMISSION

**Men and women who want to have a child should get tested for HIV** before starting a pregnancy. If a woman learns she's HIV-positive, she can take medicine during the pregnancy to *greatly* reduce the chance of passing HIV to the fetus.

**HIV is one of the few entirely preventable diseases. You can decide not to risk getting it!**

# HIV Hotline Handout

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Name \_\_\_\_\_

Period \_\_\_\_\_

**DIRECTIONS:** *Imagine you work on an HIV hotline. Answer one of the questions below from your callers. Circle the number of the question you are answering. You may ask the person more questions if you need to. Write what you would ask them and your answer to their question below and on the back of this page.*

**Caller # 1, a man:** “I was in San Francisco last week and someone who looked gay sneezed all over me when they passed me on the street. I think they may have given me HIV. Do I need an HIV test? What should I do?”

**Caller # 2, a woman:** “I just found out my girlfriend of three years has been sleeping with a guy. We don’t use dental dams because we were only supposed to have sex with each other. Do I need an HIV test? What should I do?”

**Caller # 3, a woman:** “I’ve been going out with a man who’s a lot older than me. We haven’t gone all the way yet, but we have done a lot of touching and a little...um, oral sex. I just found out that he shoots drugs. Do I need an HIV test? What should I do?”

**Caller # 4, a man:** “Me and my girlfriend have an open relationship, so we always use condoms with other people. She finally told me a condom broke with this other guy a week ago, but we’ve already had unprotected sex. Do I need an HIV test? What should I do?”

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# Individual Homework:

## Who gets HIV and how could they avoid it?

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NAME: \_\_\_\_\_

PERIOD: \_\_\_\_\_

Write or draw something based on what you learned in class today.

Answer these questions in a two-paragraph essay, a poem, a spoken word piece, or through art:

- Who gets HIV? Get beyond the stereotypes. Why do certain people get it more than others? What's the truth?
- What could someone like you do to reduce their risk?

If you write a spoken word piece and would prefer to tape it instead of handing it in in written form, it is OK to make it into a YouTube video, post it and turn in the URL.

If you create art, be prepared to explain it to your teacher.

# Family Homework: Talking about HIV and Stereotypes

**All Family Homework is optional. You may complete an Individual Homework assignment instead.**

**PURPOSE:** This is a chance to share with one another some of your own (and your family's, your religion's) beliefs about sexuality and relationships. It will also give you a chance to get to know one another a little better.

**DIRECTIONS:** Find a quiet place where the two of you – the student and the trusted adult (parent, guardian, stepparent, adult friend of the family, best friend's parent, etc.) – can talk privately. Set aside about ten minutes. During this time, please give full attention to one another ... no texting, watching TV and so on.

Now ask one another the following questions, with the understanding that:

- You are each welcome to say, "That one is too private. Let's skip it."
- What you discuss will not be shared with anyone else, even within the family, unless you give one another permission to share it.
- It's OK to feel silly or awkward and it's important to try the homework anyway.
- We recommend that you take turns asking questions. When it is your turn to listen,
- really try to understand the other person's response.

ASK ONE ANOTHER:

- The Internet is full of rumors about where HIV came from. What did you used to believe about causes of HIV that you now know isn't true? What changed your thinking?
- Some people are afraid of people who have HIV. Did you ever have fears that you no longer have about people living with HIV? What changed your thinking?
- People sometimes think that people like themselves don't catch HIV. Of course, anyone can. What could each of you do to reduce your risk of getting or giving HIV?



for lesson 12b

## Family Homework: HIV & Barriers – Confirmation Slip

**FOR FULL CREDIT, THIS HOMEWORK IS DUE:** \_\_\_\_\_

We have completed this Homework Exercise.

Date: \_\_\_\_\_

student's signature

signature of family member or trusted adult

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## References

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